



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.: 10/626,555

Confirmation No.: 9329

In re Application of:

Nicolas ECHES et al.

Group Art Unit: 3641

Filed: July 25, 2003

Examiner: Troy Chambers

For: SUB-CALIBRED PROJECTILES WITH
MULTIPLE SUPPORTS

REQUEST FOR RECONSIDERATION

Commissioner for Patents
Customer Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In response to the Office Action mailed June 15, 2006, applicants hereby request reconsideration of this application for the reasons stated below.

REMARKS

Claims 1-8 remain herein.

Claims 9 and 10, remain pending, but are currently withdrawn from consideration.

Applicants thank the Examiner for the telephone interview of October 5, 2006. In that Interview, Applicants representative argued that the prior art fails to disclose a sabot segment that has three support seats of substantially full gun caliber with the median support seat having a pusher plate, as recited in claim 1. Both Sippel and Bisping show sabot segments having two

Serial No.: 10/626,555
Docket No.: 28971.0104

seats only, not three as claimed by applicants. Sippel discloses a “pusher” type sabot where the pusher plate 5 is behind first support 4. Bisping shows a “pull” type sabot where the pusher plate 21 is in front of fins 10. There is no disclosure or teaching in either of Sippel or Bisping that would have suggested to one of ordinary skill in this art a sabot segment that has three support seats, where the middle support seat is the pusher plate. Further, there is no disclosure or teaching in either Sippel or Bisping that would have suggested the desirability of combining any portions thereof effectively to anticipate or suggest a sabot segment that has three support seats, where the middle support seat is the pusher plate. Neither Sippel nor Bisping addresses or even contemplates the problems associated with very long penetrator projectiles that experience bending oscillations when fired with two seat sabots only, which problems are addressed by the currently claimed invention. Neither Sippel nor Bisping discloses any suggestion or motivation demonstrating why a sabot would ever require more than two support seats (i.e the pusher plate and one set of fins/arms). Based upon this discussion, the Examiner stated that he found the argument persuasive, but wished to consider the argument further when presented with it in the present Request for Reconsideration.

1. Claims 1, 3, 4, 7 and 8 were rejected under 35 USC §103(a) over Sippel U.S. Patent 5,289,777 in view of Bisping U.S. Patent 4,524,695.

Sippel discloses a two-seat sabot projectile. The first seat is first support 4. The second seat is the pusher plate 5. Sippel discloses a two-seat sabot projectile only. Having the pusher plate 5 behind first support 4, Sippel discloses a “pusher” type sabot. Sippel does not disclose a

Serial No.: 10/626,555
Docket No.: 28971.0104

sabot segment that has three support seats, where the middle support seat is the pusher plate, as claimed by applicants. The use of three support seats improves the flight stability of projectiles having very long penetrators, which experience bending oscillations when being fired. Sippel is entirely silent on the problems of very long penetrators.

Bisping fails to disclose what is lacking in Sippel. Bisping, like Sippel, discloses a two-seat sabot segment only. Bisping's first seat includes fins 10. Bisping's second seat includes pusher plate 21. Bisping does not disclose a sabot segment that has three support seats, where the middle support seat is the pusher plate, as claimed by applicants. Like Sippel, Bisping does not contemplate the use of very long penetrators.

For all of the foregoing reasons, there is no disclosure or teaching in either of Sippel or Bisping that would have suggested applicants' claimed invention to one of ordinary skill in this art. Further, there is no disclosure or teaching in either Sippel or Bisping that would have suggested the desirability of combining any portions thereof effectively to anticipate or suggest applicants' claimed invention. Withdrawal of this rejection and allowance all of claims 1, 3, 4, 7 and 8 are therefore respectfully requested.

2. Claim 6 was rejected under 35 USC §103(a) over Sippel, in view of Bisping U.S. Patent 4,444,114, further in view of Wilkerson U.S. Patent 5,313,889.

Claim 6, which depends upon claim 1, is allowable for at least the reasons discussed above with respect to claim 1.

Wilkerson does not supply what is missing in Sippel or Bisping. Wilkerson discloses a


Serial No.: 10/626,555
Docket No.: 28971.0104

two-seat sabot having plastic feet, but not a sabot segment that has three support seats, where the middle support seat is the pusher plate, as claimed by applicants.

For all of the foregoing reasons, there is no disclosure or teaching in any of Sippel, Bisping and/or Wilkerson that would have suggested applicants' claimed invention to one of ordinary skill in this art. Further, there is no disclosure or teaching in any of Sippel, Bisping and/or Wilkerson that would have suggested the desirability of combining any portions thereof effectively to anticipate or suggest applicants' claimed invention. Withdrawal of this rejection of claim 6 and allowance of the same are therefore respectfully requested.

Accordingly, the application is now fully in condition for allowance and a notice to that effect is respectfully requested. The PTO is hereby authorized to charge/credit any fee deficiencies or overpayments to Deposit Account No. 19-4293 (Order No. 28971.0104). If further amendments would place this application in even better condition for issue, the Examiner is invited to call applicants' undersigned attorney at the number listed below.

Respectfully submitted,



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